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Software Engineering at Google by Fergus Henderson

Google is one the most successful companies in the world of technology which focus mostly in the development of great software. Over their lifetime Google has develop key software practices that has led them to evolve fast and in large scale. One characteristics of google software development is that their code is stored in a single unified source-code repository granting access to all software engineers. Generally all engineers can make modifications to any code that they think needs to be fix or improve.Engineers then can send the code changes for review by the code owners. To keep their software engineers motivated, Google releases are done frequently which are automated. Another great thing about Google is that allows engineers to use 20% of their time to work on any project of their choice.
For the build of code, each build is distributed across many machines, which makes possible to build extremely large programs quickly or to run many tests in parallel. Google uses different languages, such as C++,Java,Python which have their own style guides. Google develop a system called Google Protocol Buffers which enables them to serialize structure data. The generate structure data can be read using a variety of languages. Unit Testing is very important in Google. All code use in production is expected to have unit tests. Overall Google has software practices that have help them be very successful.

This article relates to the class material because Dr.Huang has encourage us to use software development practice that are use in the real world by successful companies. For example, in our project we are using unit testing to test parts of our application.

In my personal analysis, I found that the author brings a great point about how software is in develop in Google. I think that the practices use by Google are vital for any company that develops software. In my personal experience, I have use some of the practices mention in the article. For example, unit testing, code review, commit often and release code as soon as possible. Dr. Huang has encourage us to always use some of the practices use in Google.
I also have use Google Protocol for one of my CS and I think Google did a great job developing such a technology. Now we can serialize structure data and the protocol allow us to use special generated source code to easily write and read the data using a variety of languages.